INSTRUCTOR

Dr. Katie Sieving, Professor

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Office Hours in Room 320 Newins-Ziegler Hall

- Times on M & W: Sign up here!
- http://Chucao.youcanbook.me

INSTRUCTOR ASSISTANT

Po-An Chen, WEC/SNRE graduate student

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CLASS MEETING TIMES (Fall 2018)

| ACTIVITIES | TUES | PERIOD **4** | (10:40 AM - 11:30 PM) | *ROOM 002 MATHERLY* |
| DISCUSSION | THUR | PERIOD **4-5** | (10:40 AM - 12:35 PM) | *ROOM 002 MATHERLY* |

COURSE DESCRIPTION: This course includes a concise, current, and thorough grounding to the field (theory, practice, and relevance) of animal behavior, with applications of wildlife behavior to wildlife conservation / management.

COURSE OVERVIEW: We take an integrative approach to give students the tools they need to *analyze and explain* how and why animals behave as they do in different situations. *What makes this class unique* is that it has strong emphasis on applying behavioral principles to conserve/manage wild species alongside other conservation approaches (e.g., population, community management and habitat assessment/restoration). Students will utilize insights from all sub-disciplines of animal behavior to bring scientific tools to bear on real world problems *such as (examples)*:

- The behavioral underpinnings and solutions to human-wildlife conflicts such as
  - Anthropogenic behavioral traps & management strategies to minimize the 'mal'-adaptation
  - Crop-raiding by elephants, birds, et al., and developing non-lethal means of deterrence
  - Overcoming human behavioral causes of overharvest ("tragedy" of shared resources)
- Behavioral constraints affecting species reintroductions, use of fragmented habitats
- Proximate & ultimate mechanisms underlying wildlife behavioral adaptation to severe human impacts such as climate change, ionizing radiation (e.g., Chernobyl), artificial lights/noise, habitat loss, poaching, etc.

Major Learning Objectives: Students completing this class will have the …

1. Ability to analyze and explain the causes of behaviors from the following four perspectives: *a. Functional (adaptation); b. Phylogenetic (evolutionary); c. Mechanistic (effect; e.g., hormonal/neurological); d. Developmental (ontogenetic).*
2. Ability to identify evolutionary and ecological constraints on wildlife behavior at the root of human-wildlife conflicts and biodiversity declines.

3. Ability to inform conservation and management strategies that apply behavioral principles when such solutions may work better than, or in conjunction with, other solutions.

4. Ability to identify and explain both maladaptive and adaptive wildlife responses to anthropogenic changes in native environs (e.g., noise, chemical, radiation pollution; habitat alteration, disturbance; "mortality traps" in built environs, invasive species, free-ranging domestic animals, climate change…).

<u>Required Readings:</u> Lee Alan Dugatkin. 2020. **Principles of Animal Behavior** (<u>4th Edition</u>). Chicago University Press - ISBN **022644838X**

Graded Items	Point Values
• **Attend. / Prep. for class session** (13 of 15 weeks counted toward full credit; 10 pts/wk)	130/150
o 5 points for being in **lec** (Tues); 5 points for being in **lab** (Thurs)	
• **Lab assignments** (*10/12* needed for full credit; 10 points each)	100/120
• **Online Chapter Modules** (15 of 17 are counted toward full credit; 20 pts per module)	300/340
o Multiple Choice Quizzes (10 pts each x 15; minimum 90% score for credit)	*(150/170)*
o Key Concept Quizzes (10 pts each x 15; attempt for ½, do well for full credit)	*(150/170)*
• **3 midterms** (130 each)	390
TOTAL	920/1000

Necessary for an A = 90% of 920 points

<u>GRADE CALCULATIONS AND UF GRADING POLICY:</u> Overall course grade in this course will be determined on a percentage accumulation of *necessary* points. Please see UF Grade Policies here: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Extra Credit points (points that get added to your scores after grades determined – <u>*truly*</u> <u>*extra*</u> <u>*credit*</u>):

- If you attend class, prepare, and do all assignments (outside of exams) you earn 90 pts. extra credit.
  - o 20 extra points for showing up to all classes (beyond the 13 weeks needed for an A)
  - o 20 extra points for doing all 14 lab assignments beyond the 10 needed for A level work
  - o 40 extra points for doing all 17 chapter modules instead of the required 15.

Note on grading – understand that *less than the total points available* in the class is needed for an A+. I calculate the 90% needed for an A based on 920 points. 90% of 920 = 828 points – more than that = A.

What does this mean? 1000 total points are possible. But you only need 828 points for an A. And if everyone bombs an exam, the A cutoff might be less than 828 if I need to curve exam grades. This means that if you count your points as you go **and** look ahead, you can plan for absences and even skipping an exam (or part).

ATTENDANCE AND MAKEUP POLICIES:

See UF's Illness / Absence / Twelve-day Rule (Athletes) / Make-up Policy:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

My class offers a lot of flexibility – ask if you have questions. But you only need to worry (and talk to me) if you get sick or must be away for an extended absence of two weeks or more.

- *Attendance, Participation, & Homework.* If you miss an in-class exercise your attendance points are lost. But you can hand in the assigned homework for some credit. Since these assignments require thinking time, they are valuable whenever you do them. I will allow hand-ins of any of these in-class assignments up until the last week of class. Whatever you do – **COME TO CLASS**!

- *Midterms and Final Exam.* All exams include a mix of take-home and in-class work. You will have a week to complete the take-home portions. We will focus your energies on the most important materials! Even so, if you don't put in the time in class, on quizzes, and other study prep, you may have a very hard time on exams. I do not give a final exam for this class, but the third exam is partially comprehensive with take-home portions due finals week.

- *Online Chapter Modules.* You are required to finish online chapter Modules individually in a timely manner for full credit. They each have a suggested <u>due date,</u> but the real due date is the in-class exam that uses the material. ***On midterm days, quizzes are locked***.

- *Re--opening closed assignments requires documentation of legit excuses (weddings & vacays not legit).* If you have a legitimate excuse for missing an exam or a series of quizzes that you want to take after they close (sick, field course/trip, professional development, team sports away), I will need a note from a doc, another prof., coach or supervisor (w/ phone number) for us to re-open modules for make-ups.

- *That said – homework is flexible –* You can plan to go on vacay or be at a destination wedding by making sure those trips are in your planned skips that will not challenge your point totals (see extra credit above). Weekly homework from in-class exercises (labs) can be completed for credit up until finals.

EXAMS: **There are 3 midterms**, no final exam. MT's will require short explanation of terms, analysis of conservation research papers, and a longer essay. We will prepare you fully for the style and formats of these exams – with writing practice in class.

- **A long essay** (6 paragraphs; assigned ahead of time) – ***this will be done as a take-home portion***
- **Short essays** (2 paragraphs) on Conservation / Cognition Cases in text – ***IN CLASS portion***
- **Key concept** questions from readings/quizzes - **IN CLASS portion**

ONLINE CHAPTER MODULES: These have four parts.

- *A list of key concepts / topics at the top of each module.* I listed these topics because they are most important for **this course**, though may not represent all the material in a given chapter.
  - The list encompasses key things you should know from each chapter for exams.
  - Class time will be devoted to your questions and discussions concerning these key concepts.
  - There may also be a slide show, video or other short lecture presentation that clarifies one or more of the concepts. View / listen to them before proceeding.

- *Two types of 'STUDY QUIZZES':* The act of doing them gets you to study for exams, which is the point of these quizzes (which are kind of fun). When you have completed your 2 quizzes, as described, the module is finished, and you get credit for the Module.
  - ***A multiple choice quiz.*** <u>Do this one first.</u> Read over the chapter; take the quiz until you get at least 90% to get full credit. **90% score = full credit. Lots of chances to re-take the quiz.**
  - ***Key concept quizzes***. Short answers in the DEE model format.
    - Feel free to use chatbots to generate first draft answers. Then **find** the answer in the book, edit your draft, **cite a location in the text where the topic occurs**; proof, then paste!

- *A good KC answer will be in the DEE model format*. The DEE model (Define, Explain, Elaborate) uses 3-5 sentences that adhere to accurate presentation of the concept in your own words, in those 3 parts.
  - Define the concept, explain it in context of the question/text, and then give an example from the book or lecture or wherever. All three parts must be correct (**accurate, precise, and relevant**).
  - If you use a chatbot, **REWRITE** to ensure that each answer is in the DEE model format. **HINT**: if you explain the model to the chatbot ahead of time, it will do a better job.
  - Also – you will need to proof the material in the Bot's answer!!! Correctly locate the answer in your text for full credit when we grade them. Then revise the bot's answer (which may be laughably wrong).
- *If short on time* – you can risk a **BCP** (Bot, Copy, Paste) answer for the written portion of the KC questions, but **at least locate the info** in the book correctly to guarantee 5 points!
- We will randomly pick a KC question each week and grade it for everyone – if yours is blank or bazaar, then **NO CREDIT FOR THE QUIZ**! SO, make sure you at least **BCP** if you are short on time.

LAB ACTIVITY ASSIGNMENTS: You will do an in class exercise each lab session with your peers and then there will be an assignment due by the end of the weekend. An upload link will be provided. We will grade them based on decent effort (these are not detailed microbiology reports, more like reflections and field notes). MOST of these can also be done remotely on your own – BUT CLASS IS **SO MUCH MORE FUN**. There will be a page describing MOST of them so you can do them, and upload, even if you don't get to class that day.

QUESTIONS? We are all ears...

University of Florida Required Statements and Information for Students

Online Course Evaluation Process: Student assessment of instruction is an important part of efforts to improve teaching and learning. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results.

Academic Honesty: As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment. For more information on the Student Honor Code, please see: https://sccr.dso.ufl.edu/wp-content/uploads/sites/4/2018/08/The-Orange-Book-Web.pdf.

Software Use: All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate. Head for the **Help Desk** with ANY tech or software questions! https://helpdesk.ufl.edu/

Services for Students with Disabilities: The Disability Resource Center coordinates the needed accommodations of students with disabilities. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation 0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/.

The DRC requires a testing contract for administering tests at the DRC, the terms of which must be defined by the student with their professor. ***Please let me know NOW*** if you need an accommodation. After day 1 of class, you may realize that you don't need one given the flexibility baked into this course.

Campus Helping Resources: Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance. University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/. https://counseling.ufl.edu/services/guide-to-services/#clinical

Counseling Services:
- Groups and Workshops / Outreach and Consultation / Self-Help Library / Wellness Coaching
- U Matter We Care, www.umatter.ufl.edu/
- Career Connections Center, First Floor JWRU, 392-1601, https://career.ufl.edu/

Student Complaints:
- Residential Course: https://em.ufl.edu/complaint

Recording in Class: As ever, you are free to record lectures in class – anything I say is fair game (but you can't legally post/share it for anyone else). Please also respect the privacy of your peers regarding their contributions to class dialogue. Please read https://aa.ufl.edu/policies/in-class-recording/, because it severely restricts your rights to share recordings with others – even study buddies.

FL Board of Governors Anti-Discrimination Regulation 10.005: In UF classrooms, this bill "… prohibits discrimination on the basis of race, color, national origin, or sex by subjecting any student or employee to training or instruction that espouses, promotes, advances, inculcates, or compels such student or employee to believe any of the concepts as defined in paragraph (1)(a) (see this document)."

Use of AI Chatbots – These are very useful tools if used intelligently (**your** intelligence far supersedes 'raw' AI when producing **your** own work). We wiAIll encourage sophisticated, learning-enhancing uses and discourage lazy uses.

If you avoid BCP *(Bot, Copy, Paste)**, you can use AI language models intelligently to fuel your learning!***

Course Schedule

Section 1 Foundations			
DATES	**Tuesdays (1 period)**	**Thursday (2 periods)**	**Modules Due**
Aug 20/22	No class	**Introduction:** Understanding Wildlife Behavior	M1 (due next Sunday)
Aug 27/29	**T4** - Polar bear / dog Ultimate levels	**PN1** – Smartphones in the Field	**M2, M3**
Sept 3/5	**T4** - Polar bear / dog Developmental level	**PN2** – Sense meditations / Invisibility routines	**M4**
Sept 10/12	**T4** - Polar bear / dog Mechanism level	**PN3** – Wildlife Sensory Systems	**M5**
Sept 17/19	Midterm prep (essays, cases)	**PN4** - Baseline/alarm states	**M6**
Sept 24/26	**T4** - Practicum	*Midterm 1 – in class*	
Section 2 Central Themes			
Oct 1/3	**CS** – Pharmwaste	**PN5** – Sampling (scan/focal) for Budgets (time/energy)	**M8, M7**
Oct 8/10	**CS** – Strategy of Biocontrol	**PN6** – Describing social behavior (sociograms and networks)	**M9**
Oct 15/17	**CS** – Radiation: Chernobyl	**PN7** – Integration (You, observing)	**M10, M11**
Oct 22/24	**CS –** NOISE & LIGHT	**CC** – Traps! Behavioral & Evolutionary	**M12**
Oct 29/31	**CS** – Animal Personalities: = [Biodiversity](#) too!	*Midterm 2 – in class*	
Section 3 Integration			
Nov 5/7	**KP**: Are animals moral beings?	**CC** – Why animals cooperate: Prisoners dilemma	**M13, M14**
Nov 12/14	**KP**: Multi-species groups: ↓ stress = ↑ information	**CC** – Solving the "tragedy" of the commons	**M15**
Nov 19/21	**KP**: Non-lethal deterrents of wildlife crop pests	**CC** – Play behavior as stress marker	**M16, M17**
Nov 26/28	**CC:** Behavior & Conservation [Current Themes](#) & You **(no class)**	**THANKSGIVING (no class)**	
Dec 3	**Course Wrap up!**	*Reading Day (no class)*	**MT3** - Takehome portion due
PN = Progressive Naturalist Exercises; **T4** = Lectures / exercises on behavior analysis (applying Tinbergen's 4 levels of analysis); **M1-M17** = Chapter modules of text (quizzes / study guides); **CS** = Conservation Spotlight (lectures); **CC** = Conservation Case studies (groups); **KP** = Katie's Picks of depth topics for this term – integrative topics in animal behavior. **No Final Exam! Part of MT 3 will be due during finals week.**			